Summary of Accomplishments 2004-09

C. Goals, Objectives and Action Item:

A goal's, objectives and implementation schedule has been developed for each priority concern area. Though primary responsibilities are listed they are not meant to be exclusive, as additional partners such as landowners, lake associations, townships, and others may become cooperators to accomplish various goals.

Priority Concern: Surface Water Quality

Objective A. Provide for protection of all surface waters in Becker County through enforcement of existing regulations, use of existing programs and development of new programs.

- Install 100 acres of buffer strips adjacent to eligible surface waters over the next 5 years through
 the continuous CRP program.
 2005-2009: 430 acres of riparian filter strip buffers have been installed along with 132 acres of
 riparian forest buffer.
- Continue to support the efforts of the Pelican River Watershed District in their permitting program as it relates to land alterations in the shore impact and bluff impact zone.
 2003-2009 -Since 2003 the Pelican River Watershed District has contracted with the Becker SWCD to conduct site reviews and gather data on permit applications in the shore impact areas.
- 3. Contact all landowners within the Sand Lake Watershed in western Becker County as part of a Clean Water Partnership/319 Grant, and identify any resource protection needs on their properties. From 2004-2007 the Becker SWCD participated in a multiple geographic 319 grant project in the Glacial Lake Agassiz. The Sand Lake Watershed in western Becker County was chosen as part of the project area. A steering committee was developed, as the project area covered parts of two Soil and Water Conservation Districts. The steering committee coordinated the hiring of an outreach person to contact all landowners and operators within the watershed. Several public meetings were held to gage landowner interest in the project which was to gather information for each landowner regarding their lands and conservation measures that could be taken to reduce erosion and sediment contributing to Sand Lake. For a variety of reasons the project met with limited success. A complete final report can be viewed at the Clay or Becker SWCD offices.
- 4. Make landowners aware of forestation and reforestation programs, such as State Cost Share, and the Sustainable Forestry Incentives Program, available through the Minn. DNR.
- 5. Complete the nutrient reduction plan for the Upper Pelican River Watershed to reduce nutrient loading to Detroit Lake.
 - In 2007 a Watershed Plan and Environmental Assessment for the Upper Pelican River Watershed was completed by the USDA Natural Resources Conservation Service. The plan was prepared under the authority of the Watershed Protection and Flood Prevention Act. It includes the restoration of the Rice Lake Wetland complex and land treatment along Campbell Creek. Implementation of the plan will reduce the amount of sedimentation in the lakes. The restoration of the Rice Lake Wetland complex would restore the hydrology to the drained areas and is expected to reduce the amount of phosphorus loading to the lakes downstream. A complete copy of the plan can be viewed at the Pelican River Watershed District office in Detroit Lakes.

- 6. Construct and implement the nutrient reduction plan for the Upper Pelican River Watershed once approved.
 - In 2009 implementation efforts to restore Rice Lake began. The efforts include constructing a structure to restore Rice Lake. Obtain easements for affected landowners through various easement programs to accommodate the restoration. Improve Anchor Road. A completion date for the overall project is not known at this time.
- 7. Reduce nutrient loading to Detroit Lake from the Upper Pelican River Watershed by 50%. In addition to the major commitment to the Rice Lake nutrient reduction project, The District has been aggressive in enforcing its more restrictive rules on shoreline development, joined forces with the DNR and MNDOT in a major shoreline restoration project along Highway 10's overlook, and worked with the City of Detroit Lakes and MNDOT to reduce stormwater discharges to the lake.
- 8. Work with Becker County Planning and Zoning and other agencies to develop lake sustainability and carrying capacity criteria.

 In 2007 Becker County Zoning Ordinance Advisory Committee made a recommendation for implementation of lake carrying capacities for all Becker County lakes and wetlands. The proposed lake carrying capacity increased lot sizes for shorelands based on the amount of shoreline and surface water area. The Becker County Board of Commissioners did not adopt the entire recommendation. However the Board of Commissioners did adopt lake carrying capacity regulations for Natural Environmental Lakes and Wetlands.
- 9. Identify at risk lakes in Becker County and assist in the preparation of lake management plans. In addition to lake management plans for approximately 12 at-risk PRWD lakes, the PRWD continues to accumulate information on smaller, previously un-monitored lakes, some of which may even be impaired (Brandy, Wine, Abbey). Lake St. Clair has been declared "impaired", and a TMDL plan will be prepared before 2012. Several other County lakes, including Pickerel and Bad Medicine, have prepared Lake Management Plans. Becker County COLA is currently subsidizing monitoring programs on over 40 lakes, including some supported through the Legacy program. It is currently reviewing its monitoring program to incorporate additional information that would be useful in developing management plans.
- 10. Control the distribution and spread of undesirable vegetation in county lakes. PRWD has had an active aquatic plant management program for 30 years. Since the Late 1990's this program has been focused on controlling invasive species. Lake Vegetation Management Plans are currently being prepared for 7 lakes which have been infested with Flowering Rush and/or Curly-Leafed pondweed. For the past two years COLA has devoted considerable resources on invasive species issues. In 2009 the organization participated in the DNR's signage program, using a matching grant to rent billboards to display invasive-species warnings at three major highway entrances to the County.

Objective B. Protect our wetland resources from degradation.

1. Include in the revised Zoning Ordinance a minimum width for natural buffers on lakeshore development sites.

Conservation Subdivisions, Controlled Access Lots and Commercial Planned Unit Developments are required to keep 70% of the shore impact zone in a natural state. Redevelopment of nonconforming lots are required to restore a minimum lake buffer of 15 feet deep by 20 feet wide to offset lake setback.

- Maintain existing drainage systems and work with landowners to establish additional buffer strips to reduce sedimentation impacts in the Buffalo and Wild Rice Watersheds.
 In 2009 ninety nine acres of native buffers next to drainage ditches and wetlands were established in the Hay Creek Watershed area of the Buffalo-Red River Watershed District.
- 3. Continue to work with the Becker COLA on their lake monitoring program and lake management plan developments.

 In November of 2007 the Becker SWCD in cooperation with Becker COLA and RMB Laboratories applied for and was awarded a \$14,125 grant through the MPCA Surface Water Assessment Monitoring Grant Program (SWAG) to monitor 25 lakes for Total Phosphorus, chlorophyll a, and Secchi disc readings. This grant runs from 2008 and 2009 and will consist of 5 samples being taken each season. Samples for this grant were taken by volunteer lake residents. An additional SWAG grant application was submitted and approved for an additional 17 lakes to be monitored for the 2009-10 seasons. This grant totaled \$26,071 with all samples be taken by RMB Laboratories due to the undeveloped nature of the lakes and lack of residents living on them. Once gathered all data is entered into the STORET data base.
- 4. Work with appropriate agencies to inventory and create a GIS layer showing emergent vegetation areas on Becker County lakes for the purpose of reducing impacts from development, and other shoreline disturbances.
 - The Minnesota DNR Section of Fisheries annually conducts a number of lake surveys or population assessments on Becker County lakes to sample fish populations. In addition to fish sampling, lake surveys attempt to document other parameters that may affect the fish community, for example, emergent aquatic vegetation. Beds of emergent aquatic vegetation are a critical element in the ecology of a lake and provide important fish spawning, nursery, and feeding habitat. Additionally, emergent vegetation helps preserve water quality, prevents shoreline erosion, and stabilizes bottom sediments. Three or four lake surveys are typically conducted on Becker County lakes each year by the Section of Fisheries. The beds of emergent vegetation are hand drawn on a field map by the survey crew. The data is later transposed and color coded for species on to a GIS lake map. Over time, most of the Becker County fish lakes have had some level of emergent vegetation mapping, although it is quite subjective. The use of field GPS units has made some of the more recent data a little more complete and accurate. However, full scale vegetation sampling is really needed to thoroughly document a lake's aquatic vegetation component.
- 5. Carryout the provisions of the Minnesota Wetland Conservation Act throughout Becker County. The Wetland Conservation Act became a Minnesota law in 1992, and was passed to maintain and protect Minnesota's wetlands and the benefits they provide. Local units of governments such as cities, counties, watershed management organizations, townships, soil and water conservation districts implement the act locally. The Becker SWCD administers the act in Becker County for all lands in the county and for all the cities.

The law requires anyone proposing to drain, fill or excavate a wetland first to try to avoid disturbing the wetland, second to try to minimize any impact on the wetland, and finally to replace any lost wetland acres, functions and values. Certain wetland activities are exempt from the act, allowing projects with minimal impacts, or projects located on land where certain pre-established land uses are present to proceed without regulation.

On average between 150 and 200 inquires are made to the SWCD each year concerning wetland issues.

Priority Concern: Stormwater Management

Objective A. Improve stormwater runoff quality by increased utilization of stormwater management practices throughout the County.

- 1. Continue to conduct the crop residue survey inventory to monitor trends on reduced tillage farm operations in Becker County.
 - The Becker SWCD and NRCS conducted the last tillage transect in 2007, and will continue to do so as requested. No request to conduct the tillage transects has been received since 2007.
- 2. Work closely with the PRWD's permit program in regards to storm water control and impervious surfaces in the shore impact zone.
 - Since 2003 the Becker SWCD has been assisting the Pelican River Watershed District with their permit review program for permit applications within the shore land area of lakes. On site reviews are conducted and information provided to the PRWD to assist them in making decisions on these permit applications. The SWCD has reviewed 132 sites for the PRWD since 2003. This is only a portion of the permit applications handled by the PRWD during that timeframe others are handled by the PRWD staff.
- 3. Promote proper management of forestry lands to help prevent erosion and sedimentation due to logging operations.
- 4. Keep landowners informed of incentive programs such as EQIP that provide incentives for conducting conservation measures such as no-till farming, sediment basins, field windbreaks, residue and nutrient management, etc.
 - A variety of methods are used to keep the public informed of programs that provide incentives to landowners to carry out conservation measures on their lands. These include Farm Service Agency newsletters, newspaper articles, and radio programs. The NRCS, Becker SWCD, Farm Service Agency, Rural Development appear monthly on the KDLM radio station show Hodge-Podge to keep the public informed of a variety of programs available.
- 5. Identify critical erosion areas in the Buffalo, Ottertail and Wild Rice Watersheds and promote the use of erosion control measures, such as sediment control basins, to reduce sediment entering our ditches and watercourses. Priority will be given to those areas within 1000 feet of rivers, lakes and major ditch systems.
 - In 2007 the Buffalo-Red River Watershed District (BRRWD) and Becker SWCD identified the Hay Creek Sub-watershed as a high priority area due to erosion and sediment concerns impacting Stinking Lake. A Clean Water Legacy Grant application requesting \$185,000 was submitted by BRRWD and approved by the Board of Water and Soil Resources. These funds in addition to \$50,000 of BRRWD funds and the Federal EQIP Program resulted in 27 sediment and erosion control basins and 99 acres of buffers plantings being installed in the Hay Creek Watershed Project Area in 2009. An additional 27 basins will be installed in 2010.
- 6. Give high priority consideration for EQIP program participation and funding to install a total of 1500 acres of conservation tillage, 3 sediment basins and 25 acres of buffer strips in the Sand Lake Watershed, the Upper Pelican River/Campbell Creek Watershed and the Redeye River Watershed.

 The following practices were installed in the above watersheds.
 - Sand Lake -766 acres of no-till seeding, 22 acres in the Conservation Reserve Program, 18 acres of filter strips installed, 9.8 acres of wetland restoration, and 13.7 acres of wetland buffer.
- 7. Install 40 sediment and erosion control basins over the next 5 years through programs such as EQIP, State Cost-share, and others.
 - Since 2005, 128 sediment and erosion control basins have been installed with assistance from the EQIP Program, State Cost-share and Buffalo Red River Watershed District funds.

8. Seek funding from other agencies, such as the Buffalo-Red, Wild Rice, and Pelican River Watershed Districts to compliment other cost-share programs to assist in the installation of erosion control measures.

Since 2001 the Buffalo-Red River Watershed District (BRRWD) has provided \$91,800 of funding to augment the Becker SWCD cost-share program for conservation measures that are installed in the Buffalo River watershed. Numerous sediment and erosion control measures have been installed due to this extra funding.

Objective B. Promote compliance of storm water rules and ordinances by continuing to educate landowners on the use of BMPs that reduce runoff.

- Work with contractors on understanding and implementing the NPDES permitting program and its
 requirements for controlling storm water runoff during construction causing land alterations.
 NPDES responsibility is carried out and permitted by the Minnesota Pollution Control
 Agency.
- 2. Inform landowners and operators (on a watershed basis as they are selected) in Becker County of the financial benefits available through the Conservation Security Program for BMPs that they may be already carrying out on their lands.

 In 2006 the Redeye River Watershed in south east Becker County was selected to take part in the Conservation Security Program (CSP) for Best Management Practices on cropland. Though most of the watershed is in Ottertail County one landowner in Becker did receive approval for CSP funding. As a result 320 acres were enrolled. Practices included deferred haying and grazing, reduced tillage, and nutrient management.
- 3. Sponsor and carryout youth educational programs such as Ag-in-the-Classroom, Envirothon, Lakes Water Watch, Soil Stewardship Observance, 5th Grade Conservation Tour, and others that educate our youth on water management and other resource issues.
 Hundreds of students from grade school through high school continue to take part in these educational opportunities annually due to the efforts of SWCD's, Watershed Districts, volunteers, schools and many agencies.

Priority Concern: Ground Water Quality

Objective A. Protect and preserve the ground water quality in Becker County.

- 1. Continue to make available well water testing opportunities to individuals in Becker County and provide free well water testing clinics annually in cooperation with Minnesota Department of Agriculture.
 - The Becker SWCD annually conducts free water testing clinics at the Becker County Fair. Since 2005 two hundred fifty samples have been brought in for testing.
- 2. Educate landowners through news articles, brochures, etc. on the importance of properly sealing abandoned wells.
 - News releases on cost-share to seal abandoned wells are published annually along with other cost-share opportunities.
- 3. Assist landowners with the sealing of abandoned wells and provide cost-share assistance through existing programs.
 - Since 1995 the Becker SWCD has provided cost-share assistance to landowners to properly seal abandoned water wells throughout Becker County. Funding was primarily through Water Plan Funds until the un-allotment process of 2003 reduced water plan funding. Over 450 wells have been sealed since the program began. With limited funds available the number of wells sealed has gone down. Nine wells have been sealed in 2009.

- 4. Work with the City of Ogema in properly sealing wells located within the City once their new city water system is installed. Provide cost-share assistance to Ogema residents wishing to seal abandoned wells with funds provided by Becker County for sealing purposes.

 In 2004 the Becker County Board of Commissioners provided \$12,720.00 to the Becker SWCD to be used specifically for cost-sharing with residents of the City of Ogema in sealing their abandoned wells upon completion of their new city water system. In August of 2007 these funds were paid to the City of Ogema following the successful sealing of 54 abandoned wells within the city.
- Keep a record of locations of all abandoned wells sealed in Becker County with cost-share and other programs as the information becomes known.
 Locations of all abandoned well sealing locations are entered into the BWSR eLink reporting system when completed.
- 6. Assist wellhead water protection teams with the development and implementation of their Wellhead Protection Plans.
 The Becker SWCD has assisted the City of Frazee with the completion of their well head protection plan and are available to assist other communities as requested.
- 7. Continue to monitor 7 well in the Pelican River Sand Plains area and 20 in the Pineland Sand Plains Area for static water levels and provide the information to the Minn. DNR Division of Since completion of the Pineland Sands Groundwater Study in the late 1970's the Becker SWCD had been monitoring ground water levels in the study area in cooperation win Minn. DNR. The ground water study of the Pelican Sands Water Study area completed in 1982 are also monitored by the SWCD. Annual contracts are entered into with DNR. The current contract runs through June 30, 2010.
- 8. Continue to assist landowners in the proper closure of unused animal waste facilities and inform them of funding assistance that may be available through the federal EQIP program or the State Cost-share program.

 With the decline in the number of dairy herds in recent year's requests to assist landowners with the proper closure of their animal waste storage facilities has increased. From 2003- 04 twenty nine manure storage facilities were properly sealed and abandoned with cost-share funds provided by a special grant from the Board of Water and Soil Resources. From 2008-09 three additional systems were closed with cost-sharing through the Federal EOIP program.
- 9. Continue to support solid waste programs and education efforts on the proper disposal of hazardous waste and recycling programs.
 Becker County Environmental Services has continued provide integrated solid waste Becker County has implemented programs to meet and exceed the goals for recycling in greater Minnesota. The county has an established program consisting of 42+ drop off six

greater Minnesota. The county has an established program consisting of 42+ drop off sites [Recycling Sheds], one [1] Recycling Center and works with two [2] municipalities on commingled recycling programs. Education, technical information and special programs are and will be used to strengthen both the residential and commercial recycling programs that will allow Becker County to meet and exceed the recycling goal as calculated by the State of Minnesota. Presently we recycle more than 1000 tons of recyclables in Becker County. Becker County is the sponsoring county of the Regional Household Hazardous Waste (HHW)Program. The Regional Household Hazardous Waste Coordinator is an employee of the Becker County, Environmental Services Department. One permanent Household Hazardous Waste Facility is located at the Becker County Transfer Station property to which residents may bring waste materials and participate in a product exchange. In addition, the permanent Household Hazardous Waste Facility at the Becker County Transfer Station property houses the Regional Household Hazardous Waste Program mobile unit. One day collection events are held with the mobile unit in Becker County and in Cosponsoring

Counties. In 2008 the Becker County Regional Program shipped more than 30 ton of hazardous waste for proper disposal.

More than 1,354 residents brought hazardous waste in to the Becker County HHW facility to be properly managed, and 1000 residents came to the HHW facility to acquire 'good-reusable' product to use in their homes, saving Becker County thousands of dollars in disposal fees.

Becker County has public education as a primary element in the integrated solid waste program. Public education has been and will continue to be a vital component of management in each solid waste management area. It is through public education and partnerships with other environmental agencies that solid waste management goals will be achieved for the County.

Becker County Environmental Services provides opportunities to educate students in Becker County on integrated solid waste management systems, including proper disposal of mixed municipal solid waste, special wastes, hazardous waste and the recycling program. Through Conservation Days, Envirothon and Ag training we are able to better support our Solid Waste Education program for county residents.

Objective B: Work with Becker County Planning and Zoning to increase ISTS compliance.

- 1. Identify and ensure the upgrade of failing septic systems throughout Becker County. A valid certificate of compliance is required prior to the issuance of site permits. A certificate of non-compliance will require upgrades.
- 2. Continue to make low interest loans available for ISTS upgrades through the AgBMP Loan Program.
 - Since 2005 16 low interest loans totaling \$365,886 have been made for a variety of eligible practices. They include 1 ag waste management system, 8 conservation tillage equipment loans, and 7 septic system upgrade loans.
- 3. Continue to inventory and monitor ISTS systems around Becker County lakes to insure compliance with ISTS rules and regulations.
 - Three to four lakes are monitored each year as funds allow.

Priority Concern: Development Pressures

Objective A. Becker County will promote development patterns that protect agricultural land, forests, lakes and wetlands throughout the county.

- 1. Create an Environmental Review Committee to meet with developers prior to plat preparation to discuss all environmental and zoning concerns on proposed development sites. Becker County established the Becker County Environmental Technical Review Panel (ETRP) in May of 2005. The panel holds monthly pre-application meetings with developers and their agents to assist in harmonizing his/her interest with those of the County and other
- 2. Continue to enforce existing ordinances. Request assistance from appropriate agencies for ordinance revisions and updates.
 - Becker County Planning and Zoning works closely with the Becker County Attorney's Office on ordinance enforcement issues.
- 3. Assist in the development of technical changes to the Becker County P&Z Ordinances for clarification enforcement and understanding.

- In 2004 Becker County created the Zoning Ordinance Advisory Committee. From 2004-2007 the committee worked diligently to amend the ordinances.
- 4. Revise the Becker County Zoning Ordinance to require that 70% of lakeshore on new developments be left in its natural condition.

 Becker County adopted regulations requiring 70% of shoreline in new developments be preserved or restored.
- 5. Assist the MPCA with the TMDL process for water bodies as they are determined.
- 6. Incorporate the LWMP into the Becker County Comprehensive Plan.

Objective B. Encourage development patterns and land use practices that protect, enhance, maintain or restore water quality.

- 1. Revise the Becker County Planning and Zoning Ordinances (P&Z) concerning Resort Conversions, Planned Unit Developments, Common Interest Communities, out lots, funnel development and un-suitable shorelines.
 - Amended the Zoning Ordinance created standards for Multi Unit Residential Developments, Conservation Subdivisions and Resort Conversion. Eliminated controlled access lots. Created standards for preserving marginal shorelines within developments.
- 2. Work with Becker County to develop a stronger enforcement program of Becker County Ordinances.
 - Becker County Planning and Zoning works closely with the Becker County Attorney's Office to carry out enforcement of county zoning ordinances.
- 3. Educate residents on restoring and preserving natural shoreline areas.

 Becker County developed a mitigation booklet to educate citizens on restoring and preserving shorelines. In 2009 Becker County partnered with the SWCD, Watershed Districts, and Becker COLA to create and publish a Lakeshore Resource Guide.
- 4. Create County cluster development standards that include substantial buffers for agricultural areas, and encourage such development in appropriate areas of the County.
- 5. Encourage the Minnesota legislature to develop and fund conservation easement programs that protect existing marginal shore land areas from development.